INFANT AND YOUNG CHILD FEEDING

A tool for assessing national practices, policies and programmes

REFERENCES
References


5. *Demographic and Health Survey.* Calverton, Maryland, Macro International (countries and dates vary).


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Annex 1. Glossary of terms

**AIDS**: Acquired immune deficiency syndrome, which means that the HIV-positive person has progressed to active disease.

**Artificial feeding**: Feeding an infant on a breast-milk substitute.

**Baby-friendly Hospital Initiative (BFHI)**: An approach to transforming maternity practices as recommended in the joint WHO/UNICEF statement on *Protecting, promoting and supporting breastfeeding: the special role of maternity services* (1989). The BFHI was launched in 1991 by UNICEF and WHO. Baby-friendly hospitals practise the *Ten steps to successful breastfeeding* (part of the joint statement) and observe the principles and aim of the *International Code of Marketing of Breast-milk Substitutes*, including not accepting free or low-cost supplies of breast-milk substitutes, feeding bottles, teats and pacifiers. To acquire the “baby-friendly” designation, a hospital must be externally assessed according to an agreed procedure using the Global criteria.

**Bottle-feeding**: Feeding an infant from a bottle, whatever is in the bottle, including expressed breast milk, water, formula, etc.

**Breast-milk substitute**: Any food being marketed or otherwise represented as a partial or total replacement for breast milk, whether or not it is suitable for that purpose.

**Commercial infant formula**: A breast-milk substitute formulated industrially in accordance with applicable *Codex Alimentarius* standards to satisfy the nutritional requirements of infants during the first months of life up to the introduction of complementary foods.

**Complementary food**: Any food, whether manufactured or locally prepared, suitable as a complement to breast milk or to infant formula, when either becomes insufficient to satisfy the nutritional requirements of the infant.

**Complementary feeding**: The process of giving an infant food in addition to breast milk or infant formula, when either becomes insufficient to satisfy the infant's nutritional requirements. The practice of giving complementary foods.

**Cup-feeding**: Feeding from an open cup without a lid, whatever is in the cup.

**Early cessation of breastfeeding in the context of HIV/AIDS**: Stopping breastfeeding sooner than is usually recommended in order to reduce the risk of transmitting HIV via breastfeeding. Exclusive breastfeeding, followed by early cessation as soon as acceptable, feasible, affordable, sustainable and safe – taking into account local circumstances, the individual woman's situation and the risks of replacement feeding (including infections other than HIV) – is one of the options to be discussed with HIV-positive mothers. **Acceptable** means that the mother perceives no barrier to choosing the option for cultural or social reasons, or for fear of stigma and discrimination. **Feasible** means that the mother (or family) has adequate time, knowledge, skill and other resources to prepare and feed her infant, and the support to cope with family, community and social pressures. **Affordable** means that the mother and family, with available community and/or health system support, can pay for the costs of the purchase/production, preparation and use of the feeding option – including all ingredients, fuel and clean water – without compromising the health and nutrition spending of the family. **Sustainable** means availability of a continuous and uninterrupted supply and dependable system of distribution.

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32 Adapted from lists of terms in the *WHO Global Strategy for Infant and Young Child Feeding* (1); and *WHO/UNAIDS/UNICEF, HIV and infant feeding: guidelines for decision-makers* (37).
for all ingredients and commodities needed to safely implement the feeding option, for as long as the infant needs it. **Safe** means that replacement foods are correctly and hygienically stored and prepared in nutritionally adequate quantities, and fed with clean hands using clean utensils, preferably with cups.

**Exclusive breastfeeding:** Breastfeeding while giving no other food or liquid, not even water, with the exception of drops or syrups consisting of vitamins, mineral supplements or medicines.

**Expressed breast milk:** Milk that has been removed from the breasts manually or by using a pump.

**HIV:** Human immunodeficiency virus, which causes AIDS (acquired immune deficiency syndrome).

**HIV testing and counselling:** Testing which is voluntary, with fully informed consent, and confidential. This expression means the same as the terms voluntary testing and counselling (VCT) and voluntary and confidential testing and counselling (VCCT). Counselling should include life planning for the HIV-positive client, and if the client is pregnant or has recently given birth, counselling should include infant feeding considerations.

**HIV-positive:** Refers to persons who have taken an HIV test, whose results have been confirmed and who know and/or their parents know that they tested positive. **HIV-negative** refers to people who have taken a test with a negative result and who know their result. **HIV-status unknown** refers to people who have not taken an HIV test or who do not know the result of their test. **HIV-infected** refers to a person infected with HIV, but who may not know that he/she is infected.

**Infant:** A child not more than 12 months of age.

**International Labour Organization (ILO) Maternity Protection Convention 183 and Recommendation 191:** The most up-to-date international labour standards on maternity protection. They were adopted by the International Labour Conference in June 2000. The Convention, which applies to all employed women, provides the right to maternity leave of not less than 14 weeks, cash and medical benefits, job security, workplace health protection and breastfeeding breaks. Mothers who continue breastfeeding after their return to work have the right to nursing breaks or a reduction in hours of work in order to breastfeed or to express breast milk. Additional provisions regarding the adaptation of nursing breaks to particular needs and the establishment of facilities for breastfeeding at or near the workplace are found in the Recommendation. ILO Conventions are international treaties, subject to ratification by ILO Member States. Recommendations are non-binding instruments, which set out guidelines for national policy and action. Both forms are intended to have a concrete impact on working conditions and practices in every country of the world.

**International Code of Marketing of Breast-milk Substitutes, and subsequent relevant World Health Assembly resolutions:** The instrument that was adopted in the form of a recommendation by the World Health Assembly (WHA) in May 1981 to contribute to the provision of safe and adequate nutrition for infants, by the protection and promotion of breastfeeding, and by ensuring the proper use of breast-milk substitutes, when these are necessary, on the basis of adequate information and through appropriate marketing and distribution. Since 1981, the WHA has also adopted a number of resolutions that clarify the Code, and have the same status. The Code and subsequent relevant resolutions are referred to collectively in the present context as the **International Code**.

**Maternity entitlements:** Provisions for maternity leave, cash and medical benefits, job security, workplace health protection, breastfeeding breaks, and other measures to protect the health and employment rights of employed women before and after childbirth. (See also ILO Maternity Protection Convention).
Median duration of breastfeeding: The age in months when 50% of children are no longer breastfed.

Micronutrient supplements: Preparations of vitamins and minerals needed for infants. One important indication for giving micronutrient supplements is for infants who receive home prepared infant formulas (in some cases because their HIV-positive mothers have chosen to replacement feed).

Milk expression: Removing milk from the breasts manually or by using a pump.

Mother-support group: A community-based group of women providing support for optimal breastfeeding and complementary feeding. A group may be informal or part of a larger network providing information, help and support from trained counsellors and experienced mothers. Groups may meet regularly or simply provide individual mother-to-mother contacts. They may be organized by health workers or lactation consultants, but frequently they are managed autonomously by mothers within their own communities.

Mother-to-child-transmission (MTCT): Transmission of HIV to a child from an HIV-infected woman during pregnancy, delivery or breastfeeding. The term is used in this document because the immediate source of the child’s HIV infection is the mother. A woman can acquire HIV through unprotected sex with an infected partner, through receiving contaminated blood or through non-sterile instruments (such as with intravenous drug users) or medical procedures.

Optimal infant and young child feeding: Exclusive breastfeeding for the first six months of life. Thereafter, infants should receive nutritionally adequate and safe complementary foods while breastfeeding continues for up to two years of age or beyond.

Relactation: Re-establishing breastfeeding after a mother has stopped, whether in the recent or distant past.

Replacement feeding: The process of feeding a child who is not receiving any breast milk with a diet that provides all the nutrients the child needs until the child is fully fed on family foods. During the first six months this should be with a suitable breast-milk substitute. After six months it should be with a suitable breast-milk substitute, as well as complementary foods made from appropriately prepared and nutrient-enriched family foods.

Young child: A person from the age of more than 12 months up to the age of 3 years (36 months).
Annex 2. Exclusive breastfeeding rate and bottle-feeding rate calculators

| Exclusive breastfeeding rate (EBR) calculator using DHS data available for two-month intervals |
|-------------------------------------------------|-------------------------------------------------|
| From the published tables:                      | From the published tables:                      |
| 1a                  | 1b                  | 1c                  | 1d                  |
| EBR, 0–1 mo %       | EBR, 2–3 mo %       | EBR, 4–5 mo %       | Calculated EBR for children 0–< 6 months |
| % EBR rate in percentages for children 0–< 2 months | % EBR rate in percentages for children 2–< 4 months | % EBR rate in percentages for children 4–< 6 months |
| From the published tables:                      | From the published tables:                      |
| 2a                  | 2b                  | 2c                  | 2d                  |
| Number, 0–1 mo      | Number, 2–3 mo      | Number, 4–5 mo      | Calculated total number of children aged 0–<6 months |
| Total number of children in the age group 0–<2 months | Total number of children in the age group 2–<4 months | Total number of children in the age group 4–<6 months |
| Calculated absolute numbers | Calculated absolute numbers | Calculated absolute numbers | Calculated absolute numbers |
| 3a                  | 3b                  | 3c                  | 3d                  |
| Numbers EBF, 0–1 mo | Numbers EBF, 2–3 mo | Numbers EBF, 4–5 mo | Children 0–<2 months who are exclusively breastfed |
| Children 0–<2 months who are exclusively breastfed | Children 2–<4 months who are exclusively breastfed | Children 4–<6 months who are exclusively breastfed |
| Numbers EBF, 0–5 mo |                                      |                     | Children 0–<6 months who are exclusively breastfed |

Instructions for calculating the exclusive breastfeeding rate for children 0–<6 months of age:

1. Find the table on “breastfeeding status” in the chapter on infant, child and maternal nutrition in the most recent Demographic and Health Survey (DHS) for the selected country.

2. Locate the data on percentage of breastfeeding children “exclusively breastfed” and the data on the “number of living children” for the same age groups – usually the second and last columns in the table.

3. List the exclusive breastfeeding rates (EBR) in percentages for children ages 0–1, 2–3, and 4–5 in rows 1a–1c in the table above. (Use figures with one decimal point e.g. 15.6%).

4. List the total number of living children ages 0–1, 2–3, and 4–5 in rows 2a–2c in the table above.

5. Calculate the number of children in the survey aged 0–5 months by adding the numbers in rows 2a–2c and insert this number in row 2d above.

6. Calculate the number of children exclusively breastfed for each age group by multiplying the total number in each age group by the percentage exclusively breastfed in that age group and insert in the appropriate rows above (1a x 2a = 3a; 1b x 2b = 3b; 1c x 2c = 3c). Round each number to the nearest whole number.

7. Calculate the number of children exclusively breastfed 0–5 months of age by adding up the numbers of exclusively breastfed children in each age group, and insert this number in row 3d above (3a + 3b + 3c = 3d).

8. Calculate the exclusive breastfeeding rate for children 0–5 months by dividing the number of children 0–5 months exclusively breastfed by the total number of children for these same ages, and insert the percentage in row 1d above (3d /2d = 1d).

Adapted from the EBR Calculator developed by Nadra Franklin, LINKAGES Project, 1999.
Instructions for calculating the bottle-feeding rate for children 0–<12 months of age:

1. Find the table on “types of food received by children in preceding 24 hours” in the chapter on infant, child and maternal nutrition in the most recent Demographic and Health Survey (DHS) for the selected country.
2. Locate the data on percentage of breastfeeding (BF) children “using bottle with a nipple” and the data on the “number of children” for the same age groups – usually the last two columns in the table.
3. List the bottle-feeding rates (BOT) in percentages for children ages 0–1, 2–3, 4–5, 6–7, 8–9, and 10–11 in rows 1a–1f in the table above. (Use figures with one decimal point e.g. 15.6%).
4. List the total number of children ages 0–1, 2–3, 4–5, 6–7, 8–9, and 10–11 in rows 2a–2f in the table above.
5. Calculate the numbers of children in the survey aged 0–11 months by adding the numbers in rows 2a–2f and insert this number in row 2g above.
6. Calculate the numbers of BF children who are bottle-fed for each age group by multiplying the total number in each age group by the percentage bottle-fed in that age group, and insert in the appropriate rows above (1a x 2a = 3a; 1b x 2b = 3b; 1c x 2c = 3c; 1d x 2d = 3d; 1e x 2e = 3e and 1f x 2f = 3f). Round each number to the nearest whole number.
7. Calculate the number of BF children who are bottle-fed 0–11 months of age by adding up the numbers of BF children who are bottle-fed in each age group, and insert this number in row 3g above (3a + 3b + 3c +3d + 3e + 3f = 3g).
8. Calculate the bottle-feeding rate for BF children 0–5 months by dividing the number of BF children 0–11 months who are bottle-fed by the total number of BF children for these same ages and insert the percentage in row 1g above (3g /2g = 1g).

34 Adapted from the EBR Calculator developed by Nadra Franklin, LINKAGES Project, 1999.
Annex 3. Guiding principles for complementary feeding of the breastfed child

1. Practise exclusive breastfeeding from birth to six months of age, and introduce complementary foods at six months of age (180 days) while continuing to breastfeed.

2. Continue frequent, on-demand breastfeeding until two years of age or beyond.

3. Practise responsive feeding applying the principles of psychosocial care, specifically:

   Feed infants directly and assist older children when they feed themselves, being sensitive to their hunger and satiety cues. Feed slowly and patiently, and encourage children to eat, but do not force them. If children refuse many foods, experiment with different food combinations, tastes, textures, and methods of encouragement. Minimize distractions during meal times if the child loses interest easily. Remember that feeding times are periods of learning and love. Talk to children during feeding, with eye-to-eye contact.

4. Practise good hygiene and proper food handling.

5. Start at six months with small amounts of food and increase the quantity as the child gets older, while maintaining frequent breastfeeding.

   The energy needs from complementary foods for infants with average breast-milk intake in developing countries are approximately 200 kcal/day at 6–8 months of age; 300 kcal/day at 9–11 months; and 550 kcal/day at 12–23 months.

6. Gradually increase food consistency and variety as the infant gets older, adapting to the infant’s requirements and abilities.

   Infants can eat pureed, mashed and semi-solid foods beginning at 6 months. By 8 months most infants can also eat ‘finger foods’. By 12 months, most children can eat the same types of food as consumed by the rest of the family.

7. Increase the number of times that the child is fed complementary foods as he/she gets older.

   For the average healthy breastfed infant, meals of complementary foods should be provided 2–3 times per day at 6–8 months of age and 3–4 times per day at 9–11 and 12–24 months of age, with additional nutritious snacks offered 1–2 times per day, as desired.

8. Feed a variety of foods to ensure that nutrient needs are met.

   Meat, poultry, fish, or eggs should be eaten daily, or as often as possible. Vitamin A-rich fruits and vegetables should be eaten daily. Provide diets with adequate fat content.

9. Use fortified complementary foods or vitamin–mineral supplements for the infant, as needed. In some populations, breastfeeding mothers may also need vitamin–mineral supplements or fortified products.

10. Increase fluid intake during illness, including more frequent breastfeeding, and encourage the child to eat soft, varied, appetizing, favourite foods. After illness, give food more often than usual and encourage the child to eat more.

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35 From PAHO/WHO, Guiding principles for complementary feeding of the breastfed child (21).
Annex 4. Policy issues

National governments should adopt comprehensive policies on infant and young child feeding that:

- Promote infant and young child feeding practices consistent with international guidelines.
- Ensure functioning of a strong national committee and coordinator.
- Monitor trends and assess interventions and promotional activities to improve feeding practices.
- Provide technically sound and consistent messages through appropriate media and educational channels.
- Strengthen and sustain the Baby-friendly Hospital Initiative (BFHI) and fully integrate it within the health system.
- Provide health workers in health services and communities with the skills and knowledge necessary to provide counselling and support related to breastfeeding, complementary feeding, and HIV and infant feeding, and to fulfil their responsibilities under the International Code of Marketing on Breast-milk Substitutes.
- Strengthen pre-service education for health workers.
- Promote the development of community-based support networks to help ensure optimal infant and young child feeding to which hospitals can refer mothers on discharge.
- Formulate plans for ensuring appropriate feeding for infants and young children in emergency situations and other exceptionally difficult circumstances.
- Ensure that the International Code of Marketing on Breast-milk Substitutes and subsequent World Health Assembly resolutions are implemented within the country's legal framework and enforced.
- Promote maternity protection legislation that includes breastfeeding support measures for working mothers, including those employed both in the formal and informal economy.

Policies on infant and young child feeding should be:

- Officially adopted/approved by the government.
- Routinely distributed and communicated to those managing and implementing relevant programmes.
- Integrated into other relevant national policies (nutrition, family planning, integrated child health policies, etc.).

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36 Summarized from the WHO Global Strategy for Infant and Young Child Feeding (1), pages 13–15.
Annex 5. Micronutrient recommendations

A national programme should ensure that infants and young children receive required micronutrients through foods or supplements, if necessary (43–46).

Iron

Iron deficiency is mainly a consequence of poverty. Even in industrialized countries, iron deficiency affects a significant proportion of people in groups that are particularly vulnerable. Prevention strategies must involve the input and resources of a wide range of sectors and organizations. Children are at greatest risk because of the iron needed for rapid growth.

Prevention of iron deficiency involves a range of interventions, including food-based approaches to improve iron intakes and iron supplementation. These approaches should include:

- dietary improvement through strategies that improve the year-round availability of micronutrient-rich foods, ensure the access of households to these foods, and change feeding practices with respect to these foods;
- food fortification (including fortified foods for young children and emergency foods); and
- food aid.

Other actions that indirectly affect iron status might include parasitic disease control programmes (particularly those directed to hookworm, schistosomiasis and malaria control), incentive policies and improved farming systems that favour the development, availability, distribution, and use of foods that enhance iron absorption.

Iron supplementation is indicated in settings where the diet of children 6–23 months of age does not include foods fortified with iron or where anaemia prevalence is above 40%. If iron supplementation is decided and needed, consider its integration with other micronutrient control programmes. Iron supplementation is also used to correct iron deficiency anaemia (following IMCI guidelines).

Iron supplementation programmes should be integrated into broader public health programmes. For maximum effectiveness, links should be established with programmes such as malaria prophylaxis, hookworm control, immunization, environmental health, control of micronutrient malnutrition, and community-based primary health care.

Iodine

WHO, UNICEF and ICCIDD recommend a daily intake of iodine of 90 µg for children 0–59 months of age. Iodine deficiency occurs when iodine intake falls below recommended levels.

The most critical period for Iodine Deficiency Disorders (IDD) is from the second trimester of pregnancy to the third year after birth. Infants who are not exclusively breastfed are at risk of IDD. Populations living in areas with iodine deficient soils are particularly vulnerable to IDD and its effects. An estimate of the iodine situation among children under five years of age could be done by urinary iodine status of school-age children.
It is well recognized that the most effective way to achieve the virtual elimination of IDD is through universal salt iodination. A successful salt iodination programme at the national level depends upon the implementation of activities by various public and private sectors. The commitment to salt iodination should be expressed in clear legislation containing provisions for quality monitoring as well as partnerships with local, national or global salt producers. It also requires creation of public awareness about iodine deficiency.

Information on iodine deficiency (urinary iodine and goitre) in specific countries is available at the following links:

- WHO Database on Iodine Deficiency, soon to be available at:  
  http://www.who.int/nut/db_mdis.htm#idd

- International Council for the Control of Iodine Deficiency Disorders at:  
  http://www.people.virginia.edu/~jtd/iccidd/

- Information concerning salt iodization is available at:  
  http://www.unicef.org/pubsgen/salt/

**Vitamin A**

Usually surveys help to determine Vitamin A Deficiency (VAD) magnitude, severity and distribution, helping to identify high-risk populations for targeting interventions.

Biological indicators of vitamin A status include

- indicators of clinical deficiency:
  - conjunctival xerosis with Bitot’s spot
  - corneal xerosis, ulceration, keratomalacia
  - corneal scars;

- indicators of subclinical vitamin A deficiency:
  - functional: night blindness I
  - biochemical: serum retinol; breast-milk retinol; RDR (relative dose response test); MRDR (modified relative dose response test); S30DR (serum 30-day dose response)
  - histological: CIC/ICT (conjunctival impression cytology/impression cytology with transfer).

Serum retinol levels among children 6–71 months of age can be used as a proxy for vitamin A status in early infancy.

A public health problem exists when:

- the prevalence in a population of at least two biological indicators of vitamin A status is below the cut-off level;
or when

- one biological indicator of deficiency is supported by at least four (two of which are nutrition and diet-related – see below) of a composite of demographic and ecological risk factors. These risk factors include:
  - Infant mortality rate (IMR) >75/1000 live births; under-5 year mortality rate >100/1000 live births
  - Full immunizations coverage, or particularly measles immunization coverage, in < 50% of children 12–23 months of age
  - < 50% prevalence of breastfeeding in infants 6 months of age
  - Median dietary intake < 50% of recommended safe level of intake among 75% of children 1–6 years of age
  - Two-week period prevalence of diarrhoea ≥ 20%
  - Measles CRF (case fatality) rate ≥ 1 %
  - No formal schooling for ≥ 50% of women 15–44 years of age
  - < 50% of households with a safe water source.

- Two risk factors can involve nutrition and diet-related ecological indicators of areas/populations at risk of VAD. These nutrition and diet-related risk factors include:
  - Breastfeeding pattern:
    (a) < 50% of infants 0–6 months of age receive breast milk;
    (b) < 75% of children 6–18 months of age receive vitamin A-containing complementary foods at least three times per week.
  - Nutritional status: a prevalence of stunting ≥ 30% in children under 5 years of age, and wasting ≥ 10% in children under 5 years of age.
  - Low birth weight: ≥ 15%
  - Food availability: < 75% of households consume vitamin A-rich foods three times a week.
  - Dietary patterns for children 6–71 months of age and pregnant/lactating women: < 75% consume vitamin A-rich foods three times a week.
  - Food frequency: foods of high vitamin A content are eaten less than three times a week by ≥ 75% of vulnerable groups.

VAD control activities include:

- improving dietary diversity and quantity;
- improving dietary quality through food fortification; and
- appropriate amount and frequency of supplements.

It is usually appropriate to promote a mix of these activities.

A woman in labour, regardless of birth setting, should have:

- Access to care that is sensitive and responsive to the specific beliefs, values, and customs of the mother’s culture, ethnicity and religion.
- Access to birth companions of her choice who provide emotional and physical support throughout labour and delivery.
- Freedom to walk, move about, and assume the positions of her choice during labour and birth (unless restriction is specifically required to correct a complication). The use of the lithotomy position (flat on back with legs elevated) is discouraged.
- Care that minimizes routine practices and procedures that are not supported by scientific evidence (e.g. withholding nourishment; early rupture of membranes; IVs (intravenous drip); routine electronic fetal monitoring; enemas; shaving).
- Care that minimizes invasive procedures (such as rupture of membranes or episiotomies) and involves no unnecessary acceleration or induction of labour, and no medically unnecessary caesarean sections or instrumental deliveries.
- Care by staff trained in non-drug methods of pain relief and who do not promote the use of analgesic or anaesthetic drugs unless required by a medical condition.

A health facility that provides delivery services should have:

- Supportive policies that encourage mothers and families, including those with sick or premature newborns or infants with congenital problems, to touch, hold, breastfeed, and care for their babies to the extent compatible with their conditions.
- Clearly-defined policies and procedures for collaborating and consulting throughout the perinatal period with other maternity services, including communicating with the original caregiver when transfer from one birth site to another is necessary; and linking the mother and baby to appropriate community resources, including prenatal and post-discharge follow-up and breastfeeding support.
- A policy on mother-baby-friendly services (as outlined above) and staff who are trained to understand that the health and well-being of the mother, her fetus, her newborn, and the successful initiation of breastfeeding, are all part of a continuum of care.

37 Adapted with permission from the Mother-Friendly™ Childbirth Initiative of the CIMS (Coalition for Improving Maternity Services) and from the ten priorities for perinatal care developed during a meeting of the Task Force on Monitoring and Evaluation of Perinatal Care (Bologna, Italy, 2000) organized by the Child Health and Development Unit of the WHO Regional Office for Europe. More information on this Initiative and references for the scientific evidence for these recommendations can be found on www.motherfriendly.org and in Birth, 2001, 28(2):79–83) and Birth, 2001, 28(3):202–207).
## Annex 7. Education checklist
### Infant and young child feeding topics

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Content/skills</th>
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</thead>
<tbody>
<tr>
<td>(to be achieved by all health students and trainees who will care for infants, young children and mothers)</td>
<td></td>
</tr>
<tr>
<td>1. Identify factors that influence breastfeeding and complementary feeding.</td>
<td>National/local breastfeeding and complementary feeding rates and demographic trends; cultural and psychosocial influences; common barriers and concerns; local influences.</td>
</tr>
<tr>
<td>2. Provide care and support during the antenatal period.</td>
<td>Breastfeeding history (previous experience), breast examination, information targeted to mother’s needs, support.</td>
</tr>
<tr>
<td>3. Provide intra-partum and immediate postpartum care that supports and promotes successful lactation.</td>
<td>The Baby-friendly Hospital Initiative (BFHI), <em>Ten steps to successful breastfeeding</em>; supportive practices for mother and baby; potentially negative practices.</td>
</tr>
<tr>
<td>4. Assess the diets and nutritional needs of pregnant and lactating women and provide counselling, as necessary.</td>
<td>Nutritional needs of pregnant and lactating women, dietary recommendations (foods and liquids) taking account of local availability and costs; micronutrient supplementation; routine intervention and counselling.</td>
</tr>
<tr>
<td>5. Describe the process of milk production and removal.</td>
<td>Breast anatomy; lactation and breastfeeding physiology</td>
</tr>
<tr>
<td>6. Inform women about the benefits of optimal infant feeding.</td>
<td>Benefits of breastfeeding for infant, mother, family, and community; benefits of exclusive breastfeeding for 0–6 months; options and risks when unable to breastfeed.</td>
</tr>
<tr>
<td>7. Provide mothers with the guidance needed to successfully breastfeed.</td>
<td>Positioning/attachment; assessing effective milk removal; signs of adequate intake; practise observing and assessing breastfeeding and suggesting improvements.</td>
</tr>
<tr>
<td>8. Help mothers prevent and manage common breastfeeding problems. Manage uncomplicated feeding difficulties in the infant and mother.</td>
<td>Normal physical, behavioural and developmental changes in mother and child (prenatal through weaning stages); feeding history; observation of breastfeeding; suckling difficulties; causes and management of common infant feeding difficulties; causes and management of common maternal feeding difficulties.</td>
</tr>
<tr>
<td>9. Facilitate breastfeeding for infants with special health needs, including premature infants.</td>
<td>Risk/benefit of breastfeeding/breast milk; needs of premature infants; modifications; counselling mothers.</td>
</tr>
<tr>
<td>10. Facilitate successful lactation in the event of maternal medical conditions or treatments.</td>
<td>Risk/benefit; modifications; pharmacological choices; treatment choices.</td>
</tr>
<tr>
<td>11. Inform lactating women about contraceptive options.</td>
<td>Advantages and disadvantages of various child spacing methods during lactation; counselling about LAM; cultural considerations for counselling.</td>
</tr>
<tr>
<td>12. Prescribe/recommend medications, contraceptives and treatment options compatible with lactation.</td>
<td>Compatibility of drugs with lactation; effects of various contraceptives during lactation.</td>
</tr>
<tr>
<td>Task</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
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<tr>
<td>13. Assist mothers to sustain lactation during separation from their infants, including during hospitalization or illness of mother or child and when returning to work or school.</td>
<td>Milk expression, handling and storage; alternative feeding methods; cup-feeding; cause, prevention and management of common associated difficulties such as low milk supply; coordinating out-of-home activities with breastfeeding; workplace support.</td>
</tr>
<tr>
<td>14. Explain the <em>International Code of Marketing of Breast-milk Substitutes</em> and World Health Assembly resolutions, current violations, and health worker responsibilities under the <em>Code</em>.</td>
<td>Main provisions of the <em>Code</em> and WHA resolutions, including responsibilities of health workers and the breast-milk substitute, bottles and teats industries; violations by infant food companies; monitoring and enforcement of the <em>Code</em>.</td>
</tr>
<tr>
<td>15. Describe what foods are appropriate to introduce to children at various ages and which foods are available and affordable to the general population.</td>
<td>Developmental approach to introducing complementary foods; foods appropriate at various ages; available foods and their costs; incomes of local families and how income levels affect their abilities to afford various foods.</td>
</tr>
<tr>
<td>16. Ask appropriate questions of mothers and other caregivers to identify sub-optimal feeding practices with young children between 6 and 24 months of age.</td>
<td>Growth patterns of breastfed infants; complementary foods: when, what, how, how much; micronutrient deficiencies/supplements; young child feeding history; typical problems.</td>
</tr>
<tr>
<td>17. Provide mothers and other caregivers with information on how to initiate complementary feeding, using the local staple.</td>
<td>Local staples and nutritious recipes for first foods; practise counselling mothers; common difficulties and solutions.</td>
</tr>
<tr>
<td>18. Counsel mothers and other caregivers on how to gradually increase consistency, quantity, and frequency of foods, using locally available foods.</td>
<td>Guidelines for feeding young children at various ages and stages of development; potential difficulties and solutions regarding feeding and weaning; Essential Nutrition Actions.</td>
</tr>
<tr>
<td>19. Help mothers and other caregivers to continue feeding during illness and assure adequate recuperative feeding after illness.</td>
<td>Energy and nutrient needs; appropriate foods and liquids during and after illness; strategies for encouraging child to eat and drink; local beliefs about feeding during illness; appropriate feeding support during hospitalization; relactation.</td>
</tr>
<tr>
<td>20. Help mothers of malnourished children to increase appropriate food intake to regain correct weight and growth pattern.</td>
<td>Feeding recommendations for malnourished children; micronutrient supplements for malnourished children.</td>
</tr>
<tr>
<td>21. Inform mothers of the micronutrient needs of infants and young children and how to meet them through food and, when necessary, supplementation.</td>
<td>Micronutrient needs of infants and young children (iron, vitamin A, iodine, others); meeting these needs with food (breastfeeding and complementary foods); supplementation needs.</td>
</tr>
<tr>
<td>22. Demonstrate good interpersonal communication and counselling skills.</td>
<td>Listening and counselling skills, use of simple language, providing praise and support, considering mother’s viewpoint, trials of new practices.</td>
</tr>
<tr>
<td>23. Facilitate group education sessions related to infant and young child nutrition and maternal nutrition.</td>
<td>Adult education methods; strategies for preparing and facilitating competency-based, participatory sessions.</td>
</tr>
<tr>
<td>24. Counsel mothers about prevention and reduction of mother-to-child-transmission of HIV/AIDS; options and risks of various feeding methods to consider when HIV-positive.</td>
<td>Modes of mother-to-child-transmission of HIV and how to prevent or reduce them; counselling confirmed HIV-positive mothers about feeding options and risks.</td>
</tr>
<tr>
<td>25. Provide guidance on feeding of infants and young children in emergencies and appropriate protection, promotion and support in these circumstances.</td>
<td>Policies and guidelines on feeding in emergencies; appropriate promotion and support; compliance with the <em>International Code of Marketing of Breast-milk Substitutes</em> and WHA resolutions.</td>
</tr>
</tbody>
</table>
Annex 8. Community outreach and support for infant and young child feeding

Contact points that can be used for community outreach and support

- Maternity services
- Health centres
- Growth monitoring and promotion programmes
- Immunization clinics or campaigns
- Mother-support groups
- Women’s groups
- Home visits
- Workplaces
- Community meetings
- Schools
- Agricultural extension programmes
- Credit or microenterprise programmes
- Family planning programmes
- Health fairs.

Channels that can be used for community outreach and support

- Health service personnel
- Home-birth attendants
- Traditional healers
- Staff or volunteers from nongovernmental organizations (NGOs)
- Lay or peer counsellors
- Teachers
- Agricultural extension agents
- Family planning staff.

Some activities for infant and young child feeding community outreach and support

- Individual counselling
- Group counselling
- Community education
- Cooking demonstrations
- Promotion of production of food that can fill gaps in local diets
- Micronutrient campaigns
- Mother-to-mother support
- Trials of new infant or young child feeding practices
- Baby shows or contests featuring optimal infant and young child feeding
- Organization of workplace nurseries for breastfeeding infants, breastfeeding rooms or areas
- Social mobilization activities – planned actions that reach, influence and involve all relevant segments of society, such as World Breastfeeding Week activities, World Walk for Breastfeeding.

Community support strategies should focus on protection, promotion and support of both breastfeeding and complementary feeding.
Breast milk is the best food for babies. In some situations the baby’s life depends on continuing to breastfeed. Therefore it is very important to prevent another pregnancy that would cut off breastfeeding.

Breastfeeding itself helps to prevent pregnancy. Breastfeeding alone, without another family planning method, can provide effective protection against pregnancy for the first six months after delivery. It does so if:

- the woman has not had her first menstrual period since childbirth (bleeding in the first 56 days – 8 weeks – after childbirth is not considered menstrual bleeding); and
- the woman is fully or nearly fully breastfeeding – at least 85% of the baby’s feedings are breast milk.

This is called the Lactational Amenorrhoea Method (LAM).

By definition, a woman is not using LAM if the baby gets substantial food other than breast milk or the mother’s menstrual periods return or the baby reaches six months of age. To protect herself from pregnancy, she should then:

- Choose another effective family planning method that does not interfere with breastfeeding (not combined oral contraceptives before her baby is six months old); and
- Continue to breastfeed her baby if possible, even while beginning to give the baby other food. Breast milk is the healthiest food for most babies during the first two years of life.

All breastfeeding women, whether or not they are using LAM, should be counselled on:

- when they can and should start particular family planning methods; and
- the advantages and disadvantages of each method, including any effects on breastfeeding.

If a breastfeeding woman needs or wants protection from pregnancy in addition to LAM, she should first consider non-hormonal methods (IUDs, condoms, female sterilization, vasectomy, or vaginal methods). She also can consider fertility awareness-based methods, although these may be hard to use. None of these methods affects breastfeeding or poses any danger to the baby.

Women who are breastfeeding can start progestogen-only methods – progestogen-only oral contraceptives, long-acting injectables, or Norplant implants – as early as six weeks after childbirth.

The estrogen hormone in combined oral contraceptives may reduce the quantity and quality of breast milk. Therefore the World Health Organization recommends that breastfeeding women wait at least six months after childbirth to start using them. Another method, if needed, can be used until then.

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## Annex 10. HIV and infant feeding recommendations

<table>
<thead>
<tr>
<th>Situation</th>
<th>Guidelines for health workers</th>
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</thead>
</table>
| Mother’s HIV status is unknown                 | ▪ Promote availability and use of HIV testing and counselling  
▪ Promote breastfeeding as safest infant feeding method (exclusive breastfeeding for first 6 months, introduction of appropriate complementary foods at about 6 months, and continued breastfeeding to 24 months and beyond)  
▪ Counsel the mother and her partner on how to avoid exposure to HIV. |
| HIV-negative mother                            | ▪ Promote breastfeeding as safest infant feeding method (exclusive breastfeeding for first 6 months, introduction of appropriate complementary foods at about 6 months, and continued breastfeeding to 24 months and beyond)  
▪ Counsel the mother and her partner on how to avoid exposure to HIV. |
| All HIV-positive mothers                       | ▪ Provide anti-retroviral drugs to prevent MTCT  
▪ Counsel mother on the risks and benefits of various infant-feeding options, including the acceptability, feasibility, affordability, sustainability and safety of the various options  
▪ Guide the mother to choose the most appropriate infant-feeding option, according to her own situation  
▪ Counsel mother on infant feeding after six months  
▪ Refer the mother to family planning and child care services, as appropriate. |
| HIV-positive mother who chooses to breastfeed  | ▪ Promote safer breastfeeding (exclusive breastfeeding with early cessation when replacement feeding is acceptable, feasible, affordable, sustainable and safe)  
▪ Support the mother in planning and carrying out a safe transition from exclusive breastfeeding to replacement feeding  
▪ Prevent and treat breast conditions of mothers. Treat thrush in infants. |
| HIV-positive mother who chooses other breast milk option | ▪ Provide support to the mother to carry-out her option as safely as possible. |
| HIV-positive mother who chooses replacement feeding | ▪ Provide the mother with the skills to carry out her choice  
▪ Support her in her choice (including cup-feeding, hygienic preparation and storage, health care, family planning services). |
Annex 11. Infant and young child feeding in emergencies

Criteria for appropriate emergency preparedness policies and programmatic measures at the national level

The country has ensured that:

1. A policy has been endorsed or developed to address:
   - Protection, promotion and support of breastfeeding and adequate complementary feeding in emergencies.
   - Procurement, management, distribution, targeting and use of breast-milk substitutes, commercial infant foods and drinks and infant feeding equipment in emergencies in compliance with the *International Code of Marketing of Breast-milk Substitutes* (26) and subsequent WHA resolutions.

   Essential items to address in a national policy are included in:

   All documents are available at web site [http://www.ennonline.net](http://www.ennonline.net).

2. A person or team responsible for national response and coordination with the United Nations, donors, the military and nongovernmental organizations (NGOs) on issues related to infant and young child feeding in emergencies has been appointed. Responsibilities will include:
   - Development of a national contingency plan.
   - Representation of the national government during an emergency response in the following coordination activities: policy development; intersectoral coordination; development of an action plan that identifies agency responsibilities and mechanisms for accountability; dissemination of the policy and action plan to operational and non-operational agencies, including donors.
   - Involvement of affected communities in the planning process.

3. A national contingency plan to undertake activities to facilitate exclusive breastfeeding and appropriate complementary feeding and to minimize the risk of artificial feeding has been developed and resources identified for implementation during an emergency. The plan includes the following requirements in an emergency:
   - Assessment and ongoing monitoring activities will include demographic data disaggregated by age, and data on infant and young child feeding practices and support to determine priorities for action and response.
- Conditions will be created to support exclusive breastfeeding and appropriate complementary feeding (including general conditions and supportive care for all mothers and caregivers, basic aid and skilled help for mothers/caregivers experiencing problems with feeding).

- Guidelines that comply with the *International Code of Marketing on Breast-milk Substitutes* and subsequent World Health Assembly resolutions will be provided on the appropriate procurement, management, distribution, targeting and use of breast-milk substitutes and other milks, bottles and teats; adherence to these guidelines will be monitored and enforced.

- Current contact information on national infant feeding expert groups that can be consulted in an emergency situation will be available.

4. Appropriate material on infant and young child feeding in emergencies has been integrated into existing pre-service and in-service training for emergency management and relevant health care personnel. Materials include:

  - Policies and guidelines relevant to infant and young child feeding in emergencies.

  - Appropriate knowledge and skills to support caregivers in feeding infants and young children in the special circumstances of emergencies.

*Note*: Basic information on infant and young child feeding in emergencies should be provided to all who may be involved in humanitarian assistance work, including policy-makers and decision-makers who will act in an emergency, agency staff (headquarters, regional, desk and field staff) and national breastfeeding specialists.

Useful training materials include:

